

APPENDIX B

DTSC February 24, 2006 Comment letter and PWP Closure Approval Letters



an C. Lloyd, Ph.D.
Agency Secretary
Cal/EPA



Department of Toxic Substances Control

Maureen F. Gorsen, Director
1011 North Grandview Avenue
Glendale, California 91201



Arnold Schwarzenegger
Governor

February 24, 2006

CERTIFIED MAIL

Mr. M. T. Heller
Superintendent Environmental Services
ConocoPhillips Los Angeles Refinery
1660 West Anaheim Street
Wilmington, California 90744

REVIEW OF POST CLOSURE PERMIT APPLICATION, PROCESS WATER POND, CONOCO PHILLIPS LOS ANGELES REFINERY, CARSON PLANT, CALIFORNIA (EPA ID NUMBER CAD 980881676)

Dear Mr. Heller;

The California Department of Toxic Substances Control has reviewed the Post Closure Permit Application (PC) for the Process Water Pond, Carson Plant dated July 1999.

The comments listed in the enclosure dated January 19, 2006, have been prepared by DTSC's Geological Services Unit (GSU), and should be addressed by ConocoPhillips. In addition, the PC cost estimate should be updated and the detailed worksheet provided to DTSC for evaluation. DTSC is currently using U.S. EPA Cost Pro program to estimate and evaluate the cost estimates. The PC Permit Application (Part A and Part B) should be updated with new ownership information.

ConocoPhillips should submit a formal response and two copies of the revised changes to the PC Permit Application to address requested information within 60 days from the date of this letter.

If you have any questions about this letter, please call Mike Eshaghian at (818) 551-2926.

Sincerely,

Original signed by

Allan Plaza, P.E.
Unit Chief
Southern California Permitting and Corrective Action Branch

Enclosure

Certified Mail
7003 3110 0000 3702 1095
Return Receipt Requested

cc: see next page

Mr. M. T. Heller
February 24, 2006
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cc: Mr. John Embick
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Ms. Thizar Tintut-Williams
Los Angeles Regional Water Quality Control Board
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Ms. W. Wendy Arano, P.G.
Geological Services Unit
Geology, Permitting and Corrective Action Branch
Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, California 90306

Mr. Mike Eshaghian
Southern California Permitting and Corrective Action Branch
Hazardous Waste Management Program
Department of Toxic Substances Control
1011 N. Grandview Avenue
Glendale, California 91201



Alan C. Lloyd, Ph.D.
Agency Secretary
Cal/EPA



Department of Toxic Substances Control

5796 Corporate Avenue
Cypress, California 90630



Arnold Schwarzenegger
Governor

MEMORANDUM

TO: Michael Eshaghian
Hazardous Substances Scientist
Southern California Permitting and Corrective Action Branch
Hazardous Waste Management Program

FROM: Wendy W. Arano, P.G. *Original signed by*
Engineering Geologist
Geological Services Unit
Geology, Permitting and Corrective Action Branch
Hazardous Waste Management Program

DATE: January 19, 2006

SUBJECT: REVIEW OF "POST CLOSURE PERMIT APPLICATION, PART A, PART B, PROCESS WATER POND, TOSCO LOS ANGELES REFINERY, CARSON PLANT"

PCA 25035

SITE CODE 400486

WP 33

MPC 43

At your request, the Geological Services Unit (GSU) has reviewed the above-referenced permit application which is dated July 1999. The GSU has limited our review to the Part B application and generally to sections pertaining to the groundwater monitoring related to the former Resource Conservation and Recovery Act (RCRA) unit, the former Process Water Pond. The pond closure was approved by the Department in transmittals dated April 11, 1999 and April 26, 1999, which approved the Closure Plan and the Closure Certificate, respectively. The approved closure activities included permanent removal of all waste from the pond, filling the concrete-lined pond with clean clay soil, and capping the area with asphalt. The GSU acknowledges that groundwater monitoring at the Los Angeles Refinery Carson (LARC) is being conducted pursuant to requirements of the Los Angeles Regional Water Quality Control Board (RWQCB) Cleanup and Abatement Order No. 94-139. While the groundwater monitoring is conducted as required by the RWQCB, monitoring in accord with regulations specifically relating to the former RCRA unit have not been addressed in all sections of the Part B application.

It should be noted that the LARC was formerly a Tosco facility, but is currently owned and operated by ConocoPhillips.

The following GSU comments reference the section numbers and page numbers in the Part B Post-Closure Permit Application (PCPA). It should also be noted that the Department conducted a RCRA Groundwater Operation and Maintenance (O&M) Inspection in April 2002 and ConocoPhillips has initiated compliance actions in response to violations noted during that inspection. In response to the O&M Inspection, the Water Quality Sampling and Analysis Plan (WQSAP) has been revised, Appendix IX sampling was conducted, and Conoco Phillips is investigating the Gage aquifer groundwater quality. These compliance actions are reflected in the GSU comments.

1.	Section V. Groundwater Monitoring; Page 8	This section includes numerous references to the Master Workplan. Appendix C of the Master Workplan is the WQSAP. This plan was revised per requirements in the O&M Inspection report and the revised version of the WQSAP should be included in the permit application and referenced.
2.	Section V(A)(2); Page 9	<p>This section of the application indicates that monitoring wells 2, 21, 22, 24 and 35 are located upgradient of the former Process Water Pond (PWP). The GSU does not consider monitoring wells MW-21 and MW -24 as upgradient to the former RCRA unit. Wells MW-2, -22 and, -35 are along the upgradient property boundary of the LARC; while well MW-2 is the truest upgradient well within the vicinity of the RCRA unit. Monitoring well MW-30 is also in an upgradient position.</p> <p>This section of the application indicates that monitoring wells 17, 20, 31, and 38 are located downgradient of the former RCRA unit. The GSU does not agree that monitoring well MW-31 is in a downgradient location. The other wells, which are more distant from the former RCRA unit, may have impacts from sources other than a potential release from the regulated unit because of the numerous refinery activities. Revisions should be made to the section in response to these comments.</p>
3.	Section V(A)(3); Page 9	A "typical" well construction schematic has been referred to in this section of the application. There are numerous wells located at the LARC

	Section V(A)(3); Page 9 (continued)	facility with various construction; however, specific well construction diagrams and boring logs should be included for all acceptable "upgradient and downgradient" wells (see comment number 2).
4.	Section V(A)(4); Page 9 and 10	Update the response to this item and update Appendix E. Data that should be included are the data for the wells included in the WQSAP and which are monitored on a Semi-Annual basis. These include monitoring wells MW-2, -3, -5, -17, -29, -31, -32, -35, -46, -50, -54, WD-1, WD-2, WD-3, and WW-2 and WW-4.
5.	Section V(A)(5); Page 10	Update the response to indicate the date of the revised WQSAP.
6.	Section V(A)(6); Page 10	The response given in this section of the application does not demonstrate compliance with the California Code of Regulations (CCR) Title 22 Sections 66265.97 and 66270.14. Appropriate background wells must be designated and background concentrations for constituents of concern must be calculated.
7.	Section V(A)(7); Page 10	The response given in this section of the application does not demonstrate compliance with the CCR Title 22, Sections 66265.97 and 66270.14. Appropriate statistical procedures for designated wells must be specified and used for each constituent of concern and monitoring parameter to evaluate water quality monitoring data.
8.	Section V(A)(8)(a, b, and c); Page 10 and 11	The responses for these sections of the application all indicate, "Not applicable. Refer to Section V(A)(1)." The responses to Section V(A)(1) indicates that RCRA interim status wells were never specifically installed for the PWP monitoring; however, the site-wide monitoring includes the chemicals of interest for the PWP. Referring to Section V(A)(1) does not demonstrate compliance with CCR Title 22 Sections 66265.97 and 66270.14. Specific responses must be developed for each item to indicate the specific plan for groundwater quality assessment and the results of assessment.

9.	Section V(A)(9); Page 11	The response given in the PCPA does not demonstrate compliance with CCR Title 22 Sections 66265.97 and 66270.14. The annual report must contain the results of the annual evaluations and any responses taken. In fact, semi-annual reports with the results of monitoring are prepared and submitted to the Department. Reference should be made to the semi-annual groundwater monitoring reports.
10.	Section V(B)(5); Page 12	Update the response with the most current water level contour maps for Figures 16 and 17.
11.	Section V(C); Page 12	The response should be clarified to indicate that although there is no known release from the PWP, the constituents of concern from the PWP are the same as for the entire facility. RCRA monitoring is required to determine if the regulated unit is contributing to the regional groundwater contaminant plume.
12.	Section V(C)(1); Page 12	Further discussion should be provided. Maps of facility-wide groundwater contamination are provided in the semi-annual reports.
13.	Section V(C)(2); Page 13	This section indicates that the concentrations of each constituent listed in Appendix IX should be reported. The response given for this section was "Not Applicable". Further discussion should be provided since Appendix IX sampling has been conducted at selected wells in the PWP area. That data should be discussed in this section.
14.	Section V(D) Detection Monitoring Program; pages 13 through 19	No comment. Responses in this section refer to the Compliance Monitoring Program section [Section V(E)]. This is adequate for a facility that has already detected contamination and is conducting evaluation monitoring. See comments numbered 15 through 24.
15.	Section V(E) Compliance Monitoring Program; page 20	For the Waste Description sections (1)(a), (1)(b) and (1)(c), include the direct reference to Appendix C, Analytical Results-Former PWP Contents.

16.	Section V(E)(2)(a, b, and c); pages 20 and 21	Regarding the characterization of contaminated groundwater; update the response to this item as indicated in comment # 4 above, and update Appendix E. Data for the wells in the WQSAP, which are monitored on a Semi-Annual basis, should be included.
17.	Section V(E)(3); page 21	Specify the constituents monitored in addition to the text provided in the document.
18.	Section V(E)(4); pages 21 and 22.	Concentration Limits should be specified in accordance with CCR Title 22, Sections 66264.94(a), 66264.99(a)(2), and 66270.14(c)(7).
19.	Section V(E)(5); pages 22 and 23	The responses are adequate unless Alternate Concentration Limits will be established.
20.	Section V(E)(6); pages 23 through 25.	The first response on page 24 reads "Refer to <i>Master Work Plan</i> , Chapters 3 and 8". This response should be modified to refer also to the updated <i>Water Quality Sampling and Analysis Plan</i> .
21.	Section V(E)(6)(a); page 24	See comment #1.
22.	Section V(E)(6)(b); page 24	See comment #4.
23.	Section V(E)(7); pages 25 through 27	These sections refer to the Master Workplan, Chapter 4, Section 5, which discusses the salinity (Total Dissolved Solids) within the LARC shallow water table wells versus the deeper wells, and that drinking water wells have a lack of select constituents. This section needs revision to directly respond to the requested information, which is "Background Groundwater Quality" and "Plan for Establishing Groundwater Quality Data".
24.	Section V(E)(8); Pages 27 through 30	The updated <i>Water Quality Sampling and Analysis Plan</i> , with modifications made in response to the compliance requirements for the 2002 O & M Inspection, should be included as an updated Appendix of the Master Work Plan. The statistical determinations should be specified unless an alternate demonstration will be made.

25.	Section V(F); Pages 30 through 39	The responses to this section are inadequate. Details of the Corrective Action Program, as related to the former RCRA unit, should be provided.
26.	Section VI(C); Pages 42 and 43	This section does not adequately describe the inspections at the former RCRA unit and the documentation for such inspections. Written inspection logs must be kept at the facility. This section should also describe what steps will be taken in the event that erosion damage occurs to the closed unit. The reference to Chapter 8 of the Master Work Plan does not provide information regarding routine inspections of the former RCRA unit.
27.	Section VI(D); Pages 43 and 44	Reference should also be made to the revised Water Quality Sampling and Analysis Plan.
28.	Section VI(E)(7); Page 45	Any replacement of wells that are part of the RCRA monitoring network, as specified in the WQSAP, should be done with prior notification and approval from all involved agencies (e.g., DTSC, the Regional Board, and Los Angeles County).
29.	Section VI(H); Page 47	The response must be modified. The RCRA unit has not been clean-closed based on the potential that some of the groundwater contamination may have originated from the pond. A potential release from the unit may have commingled with regional groundwater contamination. For this reason, post-closure groundwater monitoring has been required.
30.	Section VI(J); Pages 48 and 49	The Post-Closure cost estimate is provided in 1998 inflation adjusted values and should be updated appropriately. The cost for groundwater monitoring should also increase due to the installation of new groundwater wells planned for 2005/2006. The text on page 49 indicates that the groundwater monitoring costs are those for the entire facility. Costs should specify those that pertain to the former RCRA-unit. The text also states that the groundwater contamination is "exclusively from sources other than the PWP." This statement should be

Michael Eshaghian
Re: Conoco Phillips, Los Angeles Refinery Carson

January 19, 2006
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		revised to acknowledge that a release from the former PWP might not be distinguishable from existing groundwater contamination and, therefore, post-closure monitoring is required.
31.	Section VI(K); Pages 49 and 54	The GSU will not comment on the Financial Assurance Mechanism for Post-Closure Care. Comments on this section are deferred to the DTSC Project Manager.

Many sections of the Part B appear to have references to the Code of Federal Regulations rather than the current California Code of Regulations. Nomenclature for monitoring is slightly different and the California regulations are more stringent in some aspects. California is authorized to regulate RCRA units within the state and the California Code of Regulations, Title 22, Chapter 14, Article 6 should be extensively referenced by the LARC.

The Hazardous Waste Management Program revised "Instructions for Preparing a Post-closure Permit Application" in January 2002. This document should be consulted when preparing the application. If you have any questions or comments please telephone me at (714) 484-5480, or e-mail me at warano@dtsc.ca.gov.

Peer reviewed by: Chris Guerre, PG, CHG, Senior Engineering Geologist
cc.: Alfredo Zanolis, CEG, CHG

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

Region 4

West Broadway, Suite 425
Fresno, CA 93702-4444

Joe
pl handle
DPC
4/16/96

April 11, 1996

JOHN Q. EMBICK

APR 16 1996

Mr. D. D. Ching
Superintendent, Environmental Affairs
Unocal Los Angeles Refinery, Carson Plant
1660 West Anaheim Street
P.O. Box 758
Wilmington, California 90744

Dear Mr. Ching:

CLOSURE PLAN APPROVAL: SURFACE IMPOUNDMENT CLOSURE PLAN, UNOCAL
LOS ANGELES REFINERY CARSON PLANT (EPA ID NO. CAD980881676)

The California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) is hereby approving the closure plan (CP) dated April 1995 with revisions dated September 22, 1995, and November 1995 for the surface impoundment referred to as Process Water Pond at the subject facility. This approved CP supersedes all previously submitted CP for this unit.

This approval is granted pursuant to Title 22, California Code of Regulations (22 CCR), Division 4.5, Chapter 15. Unocal Wilmington Plant is required to complete the closure of the surface impoundment within 180 days of receipt of this letter. You must submit two copies of the Closure Certification pursuant to 22 CCR, 66270.11(d), including supporting documents to this office within sixty (60) days after completion of closure. The Closure Certification must be signed by both the owner or operator and an independent, qualified, California registered professional engineer, in accordance with 22 CCR, 66265.115.

If you have any questions, please call Mr. D(Anand) R. Rege or my staff at (310)590-4880.

Sincerely,

Original signed by

Mohinder S. Sandhu, P.E., Chief
Facility Permitting Branch

cc: Next Page



Mr. D. D. Ching
April 11, 1996
Page 2

cc: Ms. Carmen Santos
Corrective Action Section
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U.S. Environmental Protection Agency
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San Francisco, California 94105

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California Regional Water Quality
Control Board
Los Angeles Region
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Monterey Park, California 91754

Mr. Carl Sjoberg, Chief
Industrial Waste Planning and Control
900 South Freemont Avenue, 7th Floor
Alhambra, California 91803-1331

Mr. Roger Christopher
Supervisor
Southern California Air Quality
Management District
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Long Beach, California 90810



Department of Toxic Substances Control



Winston H. Hickox
Secretary for
Environmental
Protection

Edwin F. Lowry, Director
1011 N. Grandview Avenue
Glendale, California 91201

Gray Davis
Governor

April 26, 1999

CERTIFIED MAIL

Mr. M. T. Heller
Superintendent Environmental Services
TOSCO Refining Company
1660 West Anaheim Street
Wilmington, CA 90744

Dear Mr. Heller:

ACCEPTANCE OF CLOSURE CERTIFICATION: TOSCO LOS ANGELES REFINERY, CARSON PLANT, CALIFORNIA (EPA ID NUMBER CAD 980881676)

The California Department of Toxic Substances Control has reviewed the closure certification report (Report) dated November 8, 1996 for the subject facility. Based on the Report, closure has been implemented in accordance with the April 11, 1996 closure plan which was approved by DTSC. The Report for TOSCO Los Angeles Refinery, Carson Plant is hereby accepted.

Pursuant to Title 22, California Code of Regulations, section 66270.1(c), owners or operators of surface impoundments, landfills, land treatment units, and waste pile units that received wastes after July 26, 1982, or that certified closure (according to section 66265.115) after January 26, 1983, shall have post-closure permits for the units, unless they demonstrate closure by removal as provided under subsection 66270.1(c) (5&6). If some waste residues, contaminated materials, contaminated soils or groundwater are left in place at final closure, a post-closure permit is required. The permit shall address applicable Chapter 14 water quality monitoring, corrective action, and post-closure care requirements of this division. Closure of Process Water Pond was not carried out pursuant to subsection 66270.1(c)(5&6), therefore, a post-closure permit is required for these units.

Mr. M. T. Heller
April 26, 1999
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DTSC's acceptance of the Report does not certify that the subject facility does not pose an environmental or public health threat. Neither does this acceptance release TOSCO from any liability associated with past hazardous waste management practices which occurred at the facility.

The corrective action being conducted under the Regional Water Quality Control Board is not a replacement for the post-closure permitting process. DTSC is the only state agency authorized to administer the post-closure requirements mandated by state and federal statutes and regulations. The permit application must be a stand-alone document which addresses all the requirements in Chapters 14 and 20 of Title 22, CCR, Division 4.5.

Please submit a post-closure permit application for the Process Ponds within 90 calendar days from receipt of this letter. We have enclosed a post-closure permit application checklist for your guidance.

If you have any questions or need assistance, please call Mr. Mike Eshaghian at (818) 551-2926.

Sincerely,


Original signed by

Allan Plaza, P.E.
Unit Chief
Southern California Permitting Branch

Enclosures

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Return Receipt Requested

cc: Ms. Carmen Santos
Corrective Action Section
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Mr. M. T. Heller

April 26, 1999

Page 3

cc: Mr. Kevin Wong (H-3-2)
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Mr. Roger Christopher, Supervisor
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Ms. Karen Baker, CEG
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Mr. M. T. Heller

April 26, 1999

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bcc: Ms. Florence P. Gharibian
Mr. Mukul Agarwal
Ms. Cecilia Rosana
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